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(54) Title: **SYNTHESIS OF ROCAGLAMIDE NATURAL PRODUCTS VIA PHOTOCHEMICAL GENERATION OF  
OXIDOPYRYLIUM SPECIES**

(57) Abstract: The present invention provides new strategies for the synthesis of compounds of the rocaglamide family and re-  
lated natural products. In particular, the new biomimetic synthetic approach involves photochemical generation of an oxidopyrylium  
species from a 3-hydroxychromone derivative followed by 1,3-dipolar cycloaddition of the oxidopyrylium species to a dipolarophile.  
This approach can be used for the formation of adducts containing an aglain core structure. Methods for the conversion of aglain  
core structures to aglain, rocaglamide and forbaglin ring systems are also provided. The present invention also relates to the use of  
rocaglamide/aglain/forbaglin derivatives for the manufacture of medicaments for use in the treatment of cancer or cancerous condi-  
tions, disorders associated with cellular hyperproliferation, or NF- $\kappa$ B-dependent conditions.

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